

## *ABSTRACT*

When a transmission rate of each of lines that transmit data simultaneously between two STAs by using a plurality of radio channels and/or MIMO can be set independently, one data frame is fragmented in accordance with the transmission rates of the respective lines so as to generate a plurality of data packets having the same packet time length and data sizes equal to or smaller than a maximum data size. Those data packets are transmitted simultaneously by using a plurality of radio channels, or one radio channel and MIMO, or a plurality of radio channels and MIMO.